

As already mentioned, the implant lens placed in the lens capsule, or in front of the lens capsule, supports the vitreous body from the front instead of the natural lens. In order to be able to fulfil this task even better, especially then when the support elements of the lens body are relatively thin-walled, FIG. 5 shows stiffening or reinforcement ribs or ridges 27 which can be arranged on the lateral edges of the support flaps 21", 22" provided with the holes 24" and 25", which generally give the lens more rigidity. Also, for the same purpose, stiffening ribs 16" can be arranged between the lens body 11" and the edge ridges 23".

If necessary, additional stiffening elements can be furthermore embedded in the stiffening ribs or reinforcement ribs or ridges 27, such as, in particular, wire pieces 28.

What is claimed is:

1. Posterior chamber implant lens as a replacement for the natural lens surgically removed, in particular extracapsularly, from the eye of a living being of a higher order, which has a central lens body, and holding means arranged on said lens body extending radially outwards from the periphery for fixing said lens body in its position, said lens comprising a homogeneous, clear, vulcanized silicone rubber which has the following features in combination with each other:

- (a) the lens body is formed as a convex lens, wherein the rear surface for facing the lens capsule rear wall has a greater, preferably much greater curvature than the front surface facing the iris;
- (b) on the lens body is situated a basically radially outwardly extending, thin-walled support element, the outer edge of which encircles the center point of the lens body with a diameter (D) of between approx. 9.0 and approx 12.0 mm, preferably about 10.0 to 11.0 mm;
- (c) in the support element are several spaces distributed over the element, preferably in the form of round holes;
- (d) the support element has a material thickness of between about 0.15 mm and 0.40 mm, preferably of about 0.20 mm to 0.25 mm;
- (e) the vulcanized silicone material (organopolysiloxane) has a specific gravity of between 1.01 and 1.08, preferably of about 1.02;
- (f) the vulcanized silicone material has a Shore hardness of between about 30 and 60, preferably of about 40 to 50;
- (g) the vulcanized silicone material has a temperature resistance without deformation of the lens and its components of over 356° F. during a longer, dry heat treatment lasting at least 100 hours.

2. Posterior chamber implant lens according to claim 1, wherein on at least a part of the outer edge of the support element there is positioned an outwardly rounded-off ridge.

3. Posterior chamber implant lens according to claim 1, wherein the support element for the central lens body comprises a support ring surrounding said lens body.

4. Posterior chamber implant lens according to claim 1, wherein the support element for the central lens body comprises two support flaps extending from the periphery outwards from said lens body and in opposite directions to each other, being in the vertical direction when in the position of implantation, the width of which corresponds approximately to the diameter (d) of the lens body.

5. Posterior chamber implant lens according to claim 4, wherein the spaces in the support element are in two diametrically opposed areas being at least one, however preferably two or three holes respectively.

6. Posterior chamber implant lens according to claim 1, wherein the support element has a bend towards the lens capsule rear wall being such that the center plane of the lens body is displaced towards the plane in which the outer edge of the support ring or the support element are situated by about 0.5 to 2 mm.

7. Posterior chamber implant lens according to claim 4, wherein the edges of the support flaps are substantially parallel, and wherein on the parallel edges of the support flaps, facing each other, there are arranged stiffening ribs or ridges.

8. Posterior chamber implant lens according to claim 1, wherein in the peripheral edge area of the support element there are arranged stiffening ribs or the like.

9. Posterior chamber implant lens according to claim 1, wherein the lens body has a diameter (d) of about 4.0 to 6.5 mm, preferably of about 5.5 to 6.0 mm.

10. Posterior chamber implant lens according to claim 1, wherein the radius r_1 of the front surface of the lens body is about 1.6 to 2.2 times greater than the radius r_2 of the rear surface of the lens body.

11. Posterior chamber implant lens according to claim 2, wherein the ridge on the outer edge of the support element is about 1.5 to 3 times as thick as said support element.

12. Posterior chamber implant lens according to claim 5, wherein some spaces or holes are larger than others, and wherein the larger spaces or holes in the support element have a diameter of about 1.0 mm to 2.0 mm and the smaller spaces or holes have a diameter of about 0.5 mm to 0.7 mm.

13. Posterior chamber implant lens according to claim 5, wherein the width of the upper support flap is tapered towards the outside.

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